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7590 Bacon & Thomas 4th Floor 625 Slaters Lane Alexandria, VA 22314				
EXAMINER GARCIA, ERNESTO				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/806,304

Applicant(s)

BROCHEZ, ALAIN

Examiner

ERNESTO GARCIA

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66-72 and 75-84 is/are rejected.
- 7) ☒ Claim(s) 73, 74 and 81 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The indicated allowability of claim 59, now claim 66, is withdrawn in view of the newly discovered references to Boerner, FR-2,734,599, and Rottner, DE-2,522,523. Rejections based on the newly cited references follow.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "5" (Figure 3) , "6" (Figure 3), and "40" (Figure 6) have both been used to designate the same part.

The drawings are objected to because the use of bracket in reference character 40 should be replaced with a lead line. See 37 CFR 1.84(q). Further, the free end of the resilient member has not been shown with a reference character to understand what is the free end as recited in claim 76, lines 22-23.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inclined parts being

connected to the accompanying free end of the resilient member and the free end of the resilient members (claim 76, lines 22-23) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Note that the inclined parts 34, 35 are rather part of the resilient members 40 and the free end (unreferenced) of the resilient members 40 has nothing attached thereon.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "a resilient member comprising said second leg and a connecting leg situated in an extension of said second leg" recited in claim 70, lines 2-3.

Claim Objections

Claims 76 and 84 are objected to because of the following informalities:

regarding claim 76, "can be" in line 18 should be --is-- as the language cast doubt whether is can or cannot perform the function, and "connected to the free end of the resilient member " in line 22 should be --respectively connected to the free ends of the resilient members-- and "resilient member" in line 23 should be --resilient members--; and,

regarding claim 84, "it" in line 2 should be defined, and "means of" in line 2 should be deleted since the "wedges" are the "means". Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

Claims 69-84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 69, the recitation "the first end" in line 3 makes unclear whether that is the first end of the first leg as recited in claim 67, line 5, or that of the second leg recited in claim 67, line 6.

Regarding claim 70, how does reciting that the resilient member "comprising said second leg and a connecting leg situated in an extension of said second leg" in lines 2-3 make the member be resilient in any respect. Are a second leg and a connecting leg inherently making a resilient member by mere presence?

Regarding claim 76, the recitation "material parts" in line 12 makes unclear whether the "pressed-in material part" in lines 8-9 is one of the material parts. Further, the recitation "the material" in line 12 makes unclear whether that is the material of the corner piece or that of the side members. The recitation "the inclined parts being equipped with resilient members which are connected to one another at an angle" in lines 20-21 is misdescriptive and/or inaccurate since the drawings only show the inclined parts 5, 6 are connected to each other as recited in lines 3-4. Further, it is

unclear how the inclined parts are equipped with resilient members which are connected to one another. On other words, what are the resilient members that are connected to one another? The recitation "free end" in line 22 is misused since something that contains something attached is no longer free to render being a free end. The recitations "the upsetting" in line 13 and "the total mitre" in line 13 lack proper antecedent basis.

Regarding claim 78, the recitation "the corner ... side members" in lines 1-4 is redundant since claim 76 has set forth the same locking means, the lip, and the pressing step.

Regarding claim 80, the recitation "the locking means are formed by pressed-in lips" in lines 1-2 is redundant since claim 76 has set forth the same limitations in lines 8-9. The recitation "a stop part" in line 4 makes unclear whether this is one of the stop parts recited in line 2 or another stop part. Further, "the rest of the structure" in line 5 lacks proper antecedent basis.

Regarding claim 82, the recitation "an inner wall" in lines 4-5 makes unclear whether this is the same inner wall recited in claim 76, line 6, or another inner wall.

Regarding claims 71-75, the claims depend from claim 70 and therefore are indefinite.

Claim Rejections - 35 USC § 103

Claims 66, 67, 70, 71, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of Rottner, DE-2,522,523, and further in view of Ronnlund, EP-549,554.

Regarding claim 66, Boerner discloses, in Figure 1, a corner joint comprising two frame side members **1, 8** and at least one corner piece **13**. The frame side members **1,8** have an attachment channel **A1** (see marked-up attachment) and mitered end portions **A2**. The at least one corner piece **13** has two insert parts **14, 15** joined at connecting ends and positioned relative to one another at a predetermined angle (90 degrees). The attachment channels **A1** are configured by an inner wall and an outer wall. The corner joint is provided with locking means comprising of upset material parts each in the shape of a lip projection **26** made by slantingly pressing in the upset material parts of the side members **1, 8** which cooperate with notches **A3** defined on the corner piece. Each of the insert parts **14, 15** includes at least one of the notches **A3**. However, Boerner fails to disclose the at least one notch **A3** comprising a triangular shape defined by a first side, against which the lip projection **26** is positioned, being longer than a second side over which a free end of the lip projection **26** is pressed in, the second side extending perpendicular or substantially perpendicular to the

longitudinal direction of the lip projection **26**, and the second side of the at least one notch **A3** having a buckled shape.

Ronnlund teaches, in Figure 3, at least one notch **15** comprising a triangular shape defined by a first side against which a lip projection **21** is positioned being longer than a second side over which a free end of the lip projection is pressed in, as an alternative configuration of a notch so that that multiple notches in both frame side member can be pressed-in with just one punch. Therefore, as taught by Ronnlund, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the notch in Boerner with a triangular shaped defined by a first side, against which the lip projection is positioned, is longer than the second side over which a free end of the lip projection is pressed in so that multiple notches in both frame side members can be pressed-in with just one punch. Given the modification, the second side would have extended perpendicular or substantially perpendicular to the longitudinal direction of the lip projection.

Rottner teaches, in Figure 2, a second side of a notch having a buckled shape **8a** to prevent a sharp edge thus avoiding breakage of the pressed-in lip projection. Therefore, as taught by Rottner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the second side of the notch, as modified by Ronnlund, have a buckled shape to prevent a sharp edge and thus avoid breakage of the lip projection.

Regarding claim 67, each of the insert parts includes an end portion geometrically configured in a triangle having an apex respectively directed along a longitudinal axis of the attachment channel. Each insert part defines a first leg **A7**, a second leg **A8**, and a third leg **A9**. The second leg **A8** is urged against the inner wall of the attachment channel. The first leg connects at a first end with a first end of the second leg to form the apex and extends at an oblique angle relative to the second leg in a direction generally proximal to the corner portion. The third leg extends obliquely relative to the second leg in a direction generally proximal to the corner portion and connects to the second leg.

Regarding claim 70, each of the insert parts **13**, **15** includes a resilient member comprising the second leg **A8** and a connected leg **A8'** situated in an extension of the second leg **A8**. The end portion and the resilient member of each of the insert parts **13**, **15** are connected to one another at an angle.

Regarding claim 71, the resilient members are arranged to be respectively positioned generally along the inner wall of the attachment channels **A1**.

Regarding claim 75, the insert parts **13**, **15** connect and form a unitary corner piece.

Claims 68 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of in Rottner, DE-2,522,523, and Ronnlund, EP-549,554, as applied to claims 66, 67, 70, 71, and 75, and further in view of Rhodes, EP-412,669.

Regarding claim 68, Boerner further discloses a panel **18** retained by the frame side members **1, 8**. However, the panel is not retained by wedges. Rhodes teaches, in Figure 1-3, retaining a panel with wedges **46, 48** to wedge the panel between the frame side members thus making difficult and time consuming to remove the panel during burglary. Therefore, as taught by Rhodes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wedge members to retain the panel of Schulz between the frame side members thus making the panel from being removed with difficult during burglary (col. 1, lines 33-35).

Regarding claim 69, given the modification, the first leg would have been directed such that an intersection between an edge of the panel and a theoretical line formed by the prolongation of the first end is situated near a distance from a corner of the panel. However, the distance is not 10cm from the corner of the panel. Applicant is reminded that rearranging parts of an invention involves only routine skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was to place the first leg such that the theoretical line formed by the prolongation of the

first end of the first leg is situated near 10cm from a corner of the panel. *In re Japikse*, 86 USPQ 70.

Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of in Rottner, DE-2,522,523, and Ronnlund, EP-549,554, as applied to claims 66, 67, 70, 71, and 75, and further in view of Hustadt, DE-4,305,377.

Regarding claim 72, Boerner, as modified, discloses the locking means carries out a mutual interlocking of the corner piece and the side members; however, Boerner fails to disclose a clearance respectively defined between the outer wall of the attachment channels and the insert parts and generally extending from the locking means to at least the connecting end of the insert parts **14, 15**. Hustadt teaches, in Figures 1 and 4, a clearance defined between the outer wall of a respective attachment channel and insert parts (due to the slot) and the clearance generally extending from a locking means to at least a connecting end of insert parts. Hustadt does not state the reason for providing such clearance (due to the slot); however, it appears that the clearance can be used to inject adhesive thus providing a more stable connection. Therefore, as taught by Hustadt, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a clearance between the outer wall of the attachment channels and the insert parts of Boerner so that adhesive can be provided to make a more stable connection between the frame side members.

Claims 76, 80, 82, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599.

Regarding claim 76, Boerner discloses, in Figure 1, a corner joint comprising two frame side members **1, 8** and at least one corner piece **13**. The frame side members **1,8** have an attachment channel **A1** (see marked-up attachment) and mitered end portions **A2**. The at least one corner piece **13** has two insert parts **14, 15** joined at connecting ends and positioned relative to one another at a predetermined angle (90 degrees). The attachment channels are configured by an inner wall and an outer wall. A mutual interlocking between the corner piece and the side members **1, 8** is carried out by locking means formed of lips **26** defined by a press-in material part of the outer wall. The locking means generate a press-stress in the form of pressure on both side members **1, 8** and tension in the corner piece **13**. A compression force has been created in the side members **1, 8** by pushing off the side members **1, 8** on the locking means **26**. The corner piece is equipped with inclined parts **A4** defining a pressure zone between the locking means and a place **A5** on the inner wall situated deeper in the attachment channels **A1** so that pressure increases between the place and the locking means **26**. The insert parts are equipped with members **A6** connected to one another. The inclined parts **A4** are respectively connected to an accompanying end of the members **A6**. The inclined parts **A4** create a tensile force in the members since the pressure in the inclined parts results in a tension in the members equipped in the insert parts. The tensile forces in the members equipped in the insert parts result in pressure

forces in the outer wall and the inner wall thus contributing to rigidity and pre-stress of the mitre as a whole. However, Boerner fails to disclose the member equipped at the insert parts being resilient. Applicant is reminded that making the insert parts being equipped with resilient members due to the corner piece being made of plastic is an obvious modification since parts made of plastic reduce weight and inherently result the corner piece being resilient, which is a property of plastic. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the members equipped at the insert parts being resilient to reduce weight.

Regarding claim 80, Boerner, as discussed, discloses using stop-parts **A10** situated behind the lips **26**. The stop parts extend in a prolongation of the press-on direction and the inserts parts **13**, **15** are equipped with a recess **A3** near the stop parts so that the stop parts **A10** are detached.

Regarding claim 82, each of the insert parts includes an end portion geometrically configured in a triangle having an apex respectively directed along a longitudinal axis of the attachment channel. Each insert part defines a first leg **A7**, a second leg **A8**, and a third leg **A9**. The second leg **A8** is urged against the inner wall of the attachment channel. The first leg connects at a first end with a first end of the second leg to form the apex and extends at an oblique angle relative to the second leg in a direction generally proximal to the corner portion. The third leg extends obliquely

relative to the second leg in a direction generally proximal to the corner portion and connects to the second leg.

Regarding claim 83, the inclined parts are a fragment of the first leg **A7**.

Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of Kluber, DE-19,700,604.

Regarding claim 77, Boerner, as discussed, fails to disclose a free space provided on the outside corner of the corner piece. Kluber teaches, in Figure 1, a free space provided on an outside corner of the corner piece. However, Kluber does not state the reason for the free space provided on the outside corner. It appears that providing the space at the outside corner minimizes pressure on the corner of the parts or relieves stress concentration as compared when something is in contact with the frame side members. Therefore, as taught by Kluber, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a free space on the outside corner of the corner piece to relieve stress concentration with the frame side members.

Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of Ronnlund, EP-549,554.

Regarding claim 78, Boerner, as discussed, discloses the upset material cooperating with notches **A3** (see marked-up attachment) defined on the corner piece **13**. Each of the insert parts **14, 15** includes at least one of the notches **A3**. However, Boerner fails to disclose the at least one notch comprising a triangular shape defined by a first side against which the lip projection **26** is positioned is longer than a second side over which a free end of the lip projection is pressed in, and the second side extending perpendicular or substantially perpendicular to the longitudinal direction of the lip projection **26**. Ronnlund teaches, in Figure 3, at least one notch **15** comprising a triangular shape defined by a first side against which a lip projection **21** is positioned being longer than a second side over which a free end of the lip projection is pressed in, as an alternative configuration of a notch so that that multiple notches in both frame side member can be pressed-in with just one punch. Therefore, as taught by Ronnlund, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the notch in Boerner with a triangular shaped defined by a first side, against which the lip projection is positioned, is longer than the second side over which a free end of the lip projection is pressed in so that multiple notches in both frame side members can be pressed-in with just one punch. Given the modification, the second side would have extended perpendicular or substantially perpendicular to the longitudinal direction of the lip projection.

Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of Ronnlund, EP-549,554, as applied to claim 78, and further in view of Rottner, DE-2,522,523.

Regarding claim 79, Boerner, as discussed, fails to disclose the second side of the notch having a buckled shape. Rottner teaches, in Figure 2, a second side of a notch having a buckled shape 8a to prevent a sharp edge thus avoiding breakage of the pressed-in lip projection. Therefore, as taught by Rottner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the second side of the notch, as modified by Ronnlund, have a buckled shape to prevent a sharp edge and thus avoid breakage of the lip projection.

Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boerner, FR-2,734,599, in view of Rhodes, EP-412,669.

Regarding claim 84, the corner joint is part of a frame in which a panel is provided. However, the panel is not provided by wedging the panel up by wedges. Rhodes teaches, in Figure 1-3, retaining a panel with the use of wedges 46, 48 to wedge the panel between the frame side members thus making difficult and time consuming to remove the panel during a burglary. Therefore, as taught by Rhodes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wedge members to retain the panel of Schulz between the frame side

members thus making the panel from being removed with difficult during burglary (col. 1, lines 33-35). With respect to the location of the wedges, it would have been obvious to place the middle of the wedges situated in a prolongation of the inclined parts as part of obvious locations.

Allowable Subject Matter

Claims 73 and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 81 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 73, the prior art of record does not disclose or suggest a corner piece provided with positioning elements arranged to guide the insert parts into the attachment channels, comprising elastic press-on elements, elastically bendable flaps provided on the insert parts, or support and guiding elements provided on the corner piece in the shape of a little leg having elastically bendable flaps. The closest prior art,

Boerner, FR-2,734,599, teaches, tapered end portions; however, there is no motivation to change the tapered end portion to being elastic in any respect;

regarding claim 74, the prior art of record does not disclose or suggest a corner joint comprising a corner piece including a clearance generally defined at an inside corner where insert parts connect and having a hook-shaped profile. The closest prior art of record, Rottner, DE-2,522,523, only discloses a square recess, and Kreusel, DE-2,532,890, teaches a round recess; and,

regarding claim 81, the prior art of record does not disclose or suggest a corner joint comprising stop parts being carried out in relief in the shape of a serration. The closest prior art, Ekstein, 3,797,194, disclose stop parts 178, 78; however, these do not carry a serration.

Response to Arguments

Applicant's arguments with respect to claims 66-72, 75-80, and 82-84 have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jennifer H Gay/
Supervisory Patent Examiner, Art
Unit 3676

/E. G./

Examiner, Art Unit 3679

August 11, 2008

Attachment: one marked-up page of Boerner, FR-2,734,599

